

## EDUCATION RESEARCH TRAINING GRANTS

**CFDA NUMBER: 84.305B**

**RELEASE DATE: March 20, 2008**

### REQUEST FOR APPLICATIONS

#### INSTITUTE OF EDUCATION SCIENCES

<http://ies.ed.gov>

**APPLICATION DEADLINE DATE:**

**October 2, 2008**

Section	Page
<b>PART I GENERAL OVERVIEW</b>	<b>5</b>
1. Request for Applications	5
2. Overview of the Institute's Research Programs	5
A. Outcomes	6
B. Conditions	6
a. Curriculum and instruction	6
b. Quality of the education workforce	6
c. Administration, systems, and policy	6
C. Grade Levels	6
D. Research Goals	6
Table 1: FY 2009 Research and Training Grant Topics	8
<b>PART II RESEARCH TRAINING PROGRAMS IN THE EDUCATION SCIENCES</b>	<b>9</b>
3. Purpose	9
4. Background	9
<b>PART III REQUIREMENTS FOR POSTDOCTORAL RESEARCH TRAINING PROGRAM</b>	<b>11</b>
5. General Requirements of the Proposed Postdoctoral Research Training Program	11
A. Specific Requirements for Applications Submitted to the Postdoctoral Research Training Program	11
a. Significance and purpose of the postdoctoral research training program	11
b. Training program plan	12
(i) Training director	12
(ii) Plan for recruiting postdoctoral fellows and eligibility requirements of fellows	12
(iii) Plan for training postdoctoral fellows	12
(iv) Stipend support, travel, and additional costs	13
c. Personnel	13
d. Resources	14
e. Awards	14
<b>PART IV REQUIREMENTS FOR PREDOCTORAL RESEARCH TRAINING PROGRAM</b>	<b>15</b>
6. General Requirements of the Proposed Predoctoral Research Training Program	15
A. Specific Requirements for Applications Submitted to <u>Goal One</u> of the Predoctoral Research Training Program	15
a. Significance and purpose of the predoctoral training program	15
b. Training program plan	15
(i) Program director	16

(ii) Core faculty	16
(iii) Coordinated curriculum	16
(1) Content emphases	16
(2) Methodological emphases	16
(iv) Plan for coordinating across academic units	17
(v) Plan for developing a certificate in education sciences	17
(vi) Eligibility requirements for fellows	17
(vii) Additional requirements for fellows	17
(viii) Plan for recruiting, mentoring, and retaining strong graduate students	17
(ix) Provision of fellowship stipend support for all fellows who are admitted to the program	17
(x) Additional funds	17
(xi) Funds available to support faculty and the program in general	18
(xii) Institutional commitment	18
B. Specific Requirements for Applications Submitted to <u>Goal Two</u> of the Predoctoral Research Training Program	18
a. Significance and purpose of the predoctoral training program	18
(i) Evidence of accomplishments of current predoctoral students	18
(ii) Discussion of challenges confronted during the current funding period and plans to address and overcome these challenges	18
b. Training Program Plan	19
(i) Evidence supporting request for specific number of predoctoral students	19
C. Personnel	19
D. Resources	19
E. Awards	19

## **PART V GENERAL SUBMISSION AND REVIEW INFORMATION 20**

7. Mechanism of Support	20
8. Funding Available	20
9. Eligible Applicants	20
10. Designation of Principal Investigator	20
11. Special Requirements	20
12. Letter of Intent	21
A. Content	21
a. Postdoctoral research training program	21
b. Predoctoral research training program	21
B. Format and page limitation	21
13. Application Package Available on Grants.gov	21
A. Date application package is available on Grants.gov	21
B. Download correct application package	22
a. CFDA number	22
b. Education Research Application Instructions and Application Package	22
14. Submission Process and Deadline	22
15. Application Content and Formatting Requirements	22
A. Overview	22
B. General format requirements	22
a. Page and margin specifications	23
b. Spacing	23
c. Type size (font size)	23
d. Graphs, diagrams, tables	23
C. Research training program summary/abstract	23
a. Submission	23
b. Page limitations and format requirements	23

c.	Content for postdoctoral research training program	23
d.	Content for predoctoral research training program	23
D.	Research training program narrative	24
a.	Postdoctoral research training program	24
(i)	Submission	24
(ii)	Page limitations and format requirements	24
(iii)	Format for citing reference in text	24
(iv)	Content	24
b.	Predocctoral research training program	24
(i)	Submission	24
(ii)	Page limitations and format requirements	24
(iii)	Format for citing reference in text	24
(iv)	Content	25
E.	Bibliography and references cited	25
a.	Submission	25
b.	Page limitations and format requirements	25
c.	Content	25
F.	Biographical sketches of senior/key personnel	25
a.	Submission	25
b.	Page limitations and format requirements	25
c.	Content	25
d.	List of current and pending grants	25
G.	Narrative budget justification	25
a.	Submission	25
b.	Page limitations and format requirements	26
c.	Content	26
d.	Budget clarification for Predocctoral Fellowship Goal 2 applicants only	26
e.	Indirect cost rate	26
H.	Subaward budget	26
a.	Submission	26
b.	Page limitations and format requirements	26
c.	Content	27
I.	Appendix A	27
a.	Submission	27
b.	Page limitations and format requirements	27
c.	Content for postdoctoral research training program	27
(i)	Purpose	27
(ii).	Letters of support	27
d.	Content for predoctoral research training program	27
(i)	Purpose	27
(ii).	Letters of support	28
J.	Additional Forms	28
16.	Application Processing	28
17.	Peer Review Process	28
18.	Review Criteria for Scientific Merit	28
A.	Postdoctoral Research Training Program	29
a.	Significance	29
b.	Training Program plan	29
c.	Personnel	29
d.	Resources	29
B.	Predocctoral Research Training Program	29
a.	Significance	29
b.	Training Program plan	29

6/16/2008

c. Personnel	29
d. Resources	29
19. Receipt and Start Date Schedule	30
A. Letter of intent receipt dates	30
B. Application deadline dates	30
C. Earliest anticipated start date	30
20. Award Decisions	30
21. Inquiries May Be Sent To	30
22. Program Authority	30
23. Applicable Regulations	30
24. References	30

## **PART I GENERAL OVERVIEW**

### **1. REQUEST FOR APPLICATIONS**

In this announcement, the Institute of Education Sciences (Institute) describes the research training programs that are funded through its National Center for Education Research. Separate announcements are available on the Institute's website that pertain to the research grant programs that are funded through the National Center for Education Research (<http://ncer.ed.gov/funding>) and to the research grant programs and the research training program funded through the Institute's National Center for Special Education Research (<http://ncser.ed.gov/funding>).

The Institute invites applications for its Postdoctoral Research Training grant program and its Predoctoral Research Training in the Education Sciences grant program. For the FY 2009 competition, the Institute will consider only applications that meet the requirements outlined below in this Request for Applications.

The Institute only funds institutions interested in developing a research training program, and does not directly fund individuals seeking predoctoral or postdoctoral support; individuals seeking support are encouraged to contact the directors of current IES training programs (<http://ies.ed.gov/ncer/projects/>).

### **2. OVERVIEW OF THE INSTITUTE'S RESEARCH PROGRAMS**

The Institute's over-arching priority is research that contributes to improved academic achievement for all students, and particularly for those whose education prospects are hindered by inadequate education services and conditions associated with poverty, race/ethnicity, limited English proficiency, disability, and family circumstance.

With academic achievement as the major priority, the Institute focuses on outcomes that differ by periods of education. In the infancy and preschool period, the outcomes of interest are those that enhance readiness for schooling (e.g., language skills) and developmental outcomes for infants and toddlers with disabilities. In kindergarten through 12th grade, the core academic outcomes of reading and writing (including reading and writing in the disciplines), mathematics, and science are emphasized, as well as the behaviors and social skills that support learning in school and successful transitions to employment, independent living, and post-secondary education. At the post-secondary level, the focus is on enrollment in and completion of programs that prepare students for successful careers and lives. The same outcomes are emphasized for students with disabilities across each of these periods, and include the functional outcomes that improve educational and transitional results. The acquisition of basic skills by adults with low levels of education is also a priority.

In conducting research on academic outcomes, the Institute concentrates on conditions within the control of the education system, with the aim of identifying, developing, and validating effective education programs, practices, policies, and approaches as well as understanding the factors that influence variation in their effectiveness such as implementation. Conditions that are of highest priority to the Institute are in the areas of curriculum, instruction, assessment (including the identification of students with disabilities), the quality of the education workforce, and the systems and policies that affect these conditions and their interrelationships (for example, accountability systems, delivery mechanisms including technology, and policies that support the ability of parents to improve educational results for their children through such means as choice of education services and provision of school-related learning opportunities in the home).

In this section, the Institute describes the overall framework for its research grant programs. The Institute addresses the educational needs of typically developing students through its Education Research programs and the needs of students with disabilities through its Special Education Research programs. Both the Education Research and the Special Education Research programs are organized by outcomes (e.g., reading, mathematics), type of education condition (e.g., curriculum and instruction; teacher quality; administration, systems, and policy), grade level, and research goals.

## **A. Outcomes**

The Institute's research programs focus on improvement of the following education outcomes: (a) readiness for schooling (pre-reading, pre-writing, early mathematics and science knowledge and skills, and social development); (b) academic outcomes in reading, writing, mathematics, and science; (c) student behavior and social interactions within schools that affect the learning of academic content; (d) skills that support independent living for students with significant disabilities; and (e) educational attainment (high school graduation, enrollment in and completion of post-secondary education).

## **B. Conditions**

In general, each of the Institute's research programs focuses on a particular type of condition (e.g., curriculum and instruction) that may affect one or more of the outcomes listed previously (e.g., reading). The Institute's research programs are listed below according to the primary condition that is the focus of the program.

### **a. Curriculum and instruction**

Several of the Institute's programs focus on the development and evaluation of curricula and instructional approaches. These programs include: (a) Reading and Writing; (b) Mathematics and Science Education; (c) Cognition and Student Learning; (d) Social and Behavioral Context for Academic Learning; (e) Early Childhood Programs and Policies; (f) Interventions for Struggling Adolescent and Adult Readers and Writers; and (g) Education Technology.

### **b. Quality of the education workforce**

A second condition that affects student learning and achievement is the quality of teachers and education leaders (e.g., principals, superintendents). The Institute funds research on how to improve teacher quality and education leadership through its programs on (a) Teacher Quality – Reading and Writing; (b) Teacher Quality – Mathematics and Science Education, (c) Education Leadership, and (d) Education Technology.

### **c. Administration, systems, and policy**

A third approach to improving student outcomes is to identify systemic differences in the ways in which schools and districts are led, organized, managed, and operated that may be directly or indirectly linked to student outcomes. The Institute takes this approach in its programs on (a) Education Policy, Finance, and Systems; (b) Early Childhood Programs and Policies; (c) Middle and High School Reform; and (d) Postsecondary Education.

Applicants should be aware that some of the Institute's programs cover multiple conditions. For example, the following programs cover multiple conditions: (a) Early Childhood Programs and Policies; and (b) Education Technology.

## **C. Grade Levels**

The Institute's research programs also specify the ages or grade levels covered in the research program. The specific grades vary across research programs and within each research program, and grades may vary across the research goals. In general, the Institute supports research for (a) prekindergarten and kindergarten, (b) elementary school, (c) middle school, (d) high school, (e) post-secondary education, (f) vocational education, and (g) adult education. In addition, the Institute supports research on infants and toddlers with disabilities.

## **D. Research Goals**

The Institute has established five research goals for its research programs. Within each research program one or more of the goals may apply: (a) Goal One – identify existing programs, practices, and policies that may have an impact on student outcomes and the factors that may mediate or moderate the effects of these programs, practices, and policies; (b) Goal Two – develop programs, practices, and policies that are theoretically and empirically based; (c) Goal Three – evaluate the efficacy of fully developed programs,

6/16/2008

practices, and policies; (d) Goal Four – evaluate the impact of programs, practices, and policies implemented at scale; and (e) Goal Five – develop and/or validate data and measurement systems and tools.

For a list of the Institute's FY 2009 research and training grant topics – including grant competitions through the Institute's National Center for Education Research and National Center for Special Education Research, please see Table 1 below. Funding announcements for these competitions may be downloaded from the Institute's website at <http://ies.ed.gov>.

Table 1: FY 2009 Research and Training Grant Topics

<p><b><u>National Center for Education Research</u></b></p> <p>1. Research Grant Topics</p> <ul style="list-style-type: none"><li>• Reading and Writing</li><li>• Mathematics and Science Education</li><li>• Cognition and Student Learning</li><li>• Teacher Quality – Reading and Writing</li><li>• Teacher Quality – Mathematics and Science Education</li><li>• Social and Behavioral Context for Academic Learning</li><li>• Education Leadership</li><li>• Education Policy, Finance, and Systems</li><li>• Early Childhood Programs and Policies</li><li>• Middle and High School Reform</li><li>• Interventions for Struggling Adolescent and Adult Readers and Writers</li><li>• Postsecondary Education</li><li>• Education Technology</li></ul> <p>2. Research Training Grant Topics</p> <ul style="list-style-type: none"><li>• Postdoctoral Research Training Program</li><li>• Predoctoral Research Training Program</li></ul> <p>3. National Research and Development Center Topics</p> <ul style="list-style-type: none"><li>• Center on Teacher Effectiveness</li><li>• Center on Rural Education</li><li>• Center on Turning Around Chronically Low Achieving Schools</li></ul> <p>4. Statistical and Research Methodology in Education</p> <p>5. Evaluation of State and Local Education Programs and Policies</p> <p><b><u>National Center for Special Education Research</u></b></p> <p>1. Research Grant Topics</p> <ul style="list-style-type: none"><li>• Early Intervention and Early Childhood Special Education</li><li>• Reading, Writing, and Language Development</li><li>• Mathematics and Science Education</li><li>• Social and Behavioral Outcomes to Support Learning</li><li>• Transition Outcomes for Special Education Secondary Students</li><li>• Cognition and Student Learning in Special Education</li><li>• Teacher Quality</li><li>• Related Services</li><li>• Systemic Interventions and Policies for Special Education</li><li>• Autism Spectrum Disorders</li></ul> <p>2. Research Training Grant Topics</p> <ul style="list-style-type: none"><li>• Postdoctoral Special Education Research Training</li></ul>
---



## **PART II RESEARCH TRAINING PROGRAMS IN THE EDUCATION SCIENCES**

### **3. Purpose**

The Institute has established its predoctoral and postdoctoral research training programs in the education sciences to increase the supply of scientists and researchers in education who are prepared to conduct rigorous evaluation studies, develop and evaluate new products and approaches that are grounded in a science of learning, and design and validate tests and measures. The specific intent of these programs is to prepare researchers who are able to prepare competitive proposals that address relevant education topics and meet the methodological requirements specified in the research goals described in the Requests for Applications for the Institute's research grant competitions.

The Institute's research grant competitions are designed to produce research that contributes to the solution of education problems identified by education decision-makers and practitioners. These research grant programs target key student outcomes and the types of research questions posed by education decision-makers and practitioners.<sup>1</sup> In early childhood, the primary outcomes of interest are school readiness and developmental outcomes for infants and toddlers with disabilities. From kindergarten through Grade 12, the core academic outcomes of reading, writing, mathematics, and science are the central outcomes of interest, as well as social and behavioral skills that support academic learning in school, and successful transitions to employment, independent living, and postsecondary education. At the postsecondary level, the Institute focuses on improving access to and completion of postsecondary education. Finally, for adults with low levels of education, the Institute supports research to improve the acquisition of basic reading, writing, and mathematics skills.

### **4. Background**

A number of recent reports have described current education practice as not resting on a solid research base (Coalition for Evidence-Based Policy, 2002; National Research Council 1999, 2000, 2002). Instead, policy and practice decisions are often guided by personal experience, folk wisdom, and ideology. Grounding education policy and practice in the United States on evidence will require transformation of both the research and practice fields. Practitioners will have to turn routinely to education research when making important decisions, and education researchers will have to produce research that is relevant to those decisions. To achieve this ambitious agenda, there is a need for a cadre of well-trained scientists capable of conducting high quality research that is relevant to practitioners and policy makers.

Many of the questions raised by practitioners and policy makers require answers to questions of what works in education for whom and under what circumstances. These are causal questions that are best answered by research using randomized controlled trials or well-designed quasi-experimental designs. Through its research grant programs, the Institute encourages research that addresses questions of what works, for whom, and under what circumstances by inviting applicants to submit proposals to carry out such projects under the *Efficacy and Replication* goal and the *Scale-Up Evaluations* goal in the Institute's research funding announcements.

Another category of questions raised by the practice community focuses on assessment; the standards and accountability movement has generated a ballooning demand for assessment research. Across its research grant programs, the Institute encourages the development and validation of assessments under the *Measurement and Assessment* goal in the Institute's research funding announcements. Individuals with skills in psychometrics are needed throughout the education sector, from federal statistics agencies to state education agencies, from test developers to local school districts.

Yet another category of problems raised by practitioners and policy makers is the need for a new generation of teaching materials and curricula that take advantage of expanding knowledge of how people

---

<sup>1</sup> Descriptions of the Institute's research programs are available in the Institute's current Education Research Request for Applications available at <http://ies.ed.gov/funding/>.

learn, and that leverage new delivery mechanisms such as the internet (National Research Council, 2000). Across its research grant programs, the Institute supports projects to develop new education interventions (e.g., curricula, instructional approaches, professional development training) under the *Development* goal in the Institute's research grant funding announcements. The conceptualization, development, implementation, and evaluation of new teaching methods will require scientists who are well trained in cognition, learning, motivation, classroom instruction, and teacher training, and who are prepared to conduct research – both development and evaluation studies – in complex, real-world education settings.

The needs of education policy and practice are served not only by research that directly addresses questions of what works but also by research that raises questions and generates hypotheses that can eventually lead to new applications or refinements of existing approaches (National Research Council, 2002). Hypothesis-generating research may rely on complex statistical methods that can tease apart potential causal influences in large datasets or may involve detailed observations of classroom instruction along with sophisticated quantitative analyses to determine the associations between instruction and child outcomes. Across our research grant programs, these types of research efforts are supported under the *Identification* goal in the Institute's research grant funding announcements.

Statistical training is also needed in the design and analysis of experimental and quasi-experimental studies, as well as survey and observational data. Although there are many doctoral training programs that focus on statistics, the application of this expertise to problems in education requires that students be grounded in education content. That, in turn, requires a concentration of statistically sophisticated students and faculty who are focused on education topics.

## **PART III REQUIREMENTS FOR POSTDOCTORAL RESEARCH TRAINING PROGRAM**

### **5. GENERAL REQUIREMENTS OF THE PROPOSED POSTDOCTORAL RESEARCH TRAINING PROGRAM**

Program Officer: Dr. Robin Harwood (202-208-3896; Robin.Harwood@ed.gov).

The Institute's objectives in creating the Postdoctoral Research Training Program in the Education Sciences are to support the training of postdoctoral fellows interested in conducting applied education research and to produce a cadre of education researchers willing and able to conduct a new generation of methodologically rigorous and educationally relevant scientific research that will provide solutions to our nation's most pressing problems and challenges in education. Grants will be awarded to faculty members from a variety of relevant disciplines and fields (for example, economics, education, human development, political science, psychology, sociology, statistics) within qualified institutions of higher education that will provide intensive training in education research and statistics. Postdoctoral students will typically be supported for two or three years, and will be expected to conduct research on education topics.

The Postdoctoral Research Training Program funded by the National Center for Education Research focuses on training for research in general education (i.e., for typically developing students). Individuals interested in postdoctoral research training fellowships to support research in special education should refer to the postdoctoral research training program supported by the Institute's National Center for Special Education Research (<http://ies.ed.gov/ncser/funding/postdoc>).

An institution of higher education may have more than one Postdoctoral Research Training award and may submit more than one Postdoctoral Research Training application as long as different faculty (i.e., Training Director and other key personnel) are responsible for the separate training programs and the training programs have unique areas of research emphasis.

Applicants who intend to revise and resubmit a proposal that was not funded in a previous competition must indicate on the application form that their FY 2009 proposal is a revised proposal. Their prior reviews will be sent to this year's reviewers along with their proposal. Applicants should indicate the revisions that were made to the proposal on the basis of the prior reviews using no more than 3 pages of Appendix A. Please note that the Institute **will not accept applications from current recipients (i.e., Training Directors/Principal Investigators) of Postdoctoral Training grants with start dates before the end of their current award** (e.g., if a Training Director has an FY 2005 Postdoctoral award with an end date of July 30, 2009, a proposal for a new FY 2009 Postdoctoral award must have a start date between August 1, 2009 and September 15, 2009.)

#### **A. Specific Requirements For Applications Submitted to the Postdoctoral Research Training Program.**

##### **a. Significance and purpose of the postdoctoral research training program**

Applicants should make a compelling case for the potential contribution of the proposed postdoctoral research training program for training postdoctoral fellows to **gain the knowledge and skills necessary to conduct the types of research the Institute funds**. Applicants should clearly describe how the training relates to the specific research programs of the National Center for Education Research, Institute of Education Sciences. Research programs of the Institute are organized by topic area (e.g., reading and writing, mathematics and science, early childhood education, cognition and student learning) and by research goal (e.g., Identification, Development, Efficacy & Replication, Scale-Up Evaluations, or Measurement). Applicants should clearly describe both the topical focus and methodological focus of their proposed training program.

Applicants who currently have or in the past have had a postdoctoral research training grant from the Institute should provide evidence that their current or former postdoctoral fellows have or are developing the knowledge and skills that will enable them to prepare competitive grant proposals to the Institute and/or conduct research projects that reflect the Institute's content and methodological foci and are productive as education researchers. Such applicants must include a summary table in Appendix A of (a) name of the fellows' primary postdoctoral mentor, (b) the research projects that have been completed or are currently being conducted by their postdoctoral fellows who received support under a prior award, (c) the research topic and methods used for each project, (d) the publications of their postdoctoral fellows, and (e) current positions of former postdoctoral fellows.

**b. Training program plan.**

Plans for the proposed postdoctoral research training programs must include the components listed below.

**(i) Training Director.**

A Training Director will be the head of the training fellowship and is expected to be the primary mentor for the fellows' research and training activities. The Training Director will have overall responsibility for the administration of the award and interactions with the Institute.

The Training Director must be the Principal or Co-Principal Investigator on one or more education research projects, currently supported by the Institute or other funding sources, that are appropriate for postdoctoral level research training.

**(ii) Plan for recruiting postdoctoral fellows and eligibility requirements of fellows.**

Applicants must include a plan for recruiting postdoctoral fellows, including outreach efforts to encourage applications from members of under-represented minorities. Training Directors are encouraged to consider recruiting fellowship candidates from disciplines other than their own.

Postdoctoral fellowship candidates must be citizens or permanent residents of the United States, and must have received their doctorate prior to beginning the fellowship. Before candidates are offered a fellowship, the Institute must approve postdoctoral fellowship candidates who: (a) have received postdoctoral support through other federal training programs; (b) received support through one of the Institute's predoctoral training grant programs; or (c) The Institute must approve postdoctoral fellows who have an existing relationship with the Training Director (e.g., dissertation advisor).

**(iii) Plan for training postdoctoral fellows.**

The applicant must include a plan for training postdoctoral fellows to conduct rigorous education research. Fellows should: (a) gain the breadth of skills and understanding necessary to conduct rigorous applied research in education, and (b) develop the capacity to independently carry out such research, including applying for grant funding and submitting results for publication in peer-reviewed journals.

The length of the postdoctoral fellowship will typically be two to three years.

Applicants should clearly specify the role that the fellows will play in the Training Director's education research projects, and how these and other training activities will produce independent researchers capable of developing their own education research programs, seeking grant support, and presenting the results of their research in peer-reviewed forums such as professional conferences and journals.

**From the Institute's view, a postdoctoral training program would be successful if it produced education researchers who are able to submit competitive applications to the Institute's research competitions.** Applicants should demonstrate their capacity to

provide such training by describing their current research projects and the relation of these projects to the Institute's research priorities. Applicants must include a summary table in Appendix A of ongoing education research projects that are being conducted by the Training Director and other faculty involved in the proposed training program. For each project listed in this table, the following information should be provided: (a) principal investigator and other core faculty involved in the project; (b) brief description of the research project, including methods used; (c) brief explanation of how the project fits with the Institute's research programs and goals as listed in the Institute's Education Research Request for Applications (<http://ies.ed.gov/ncer/funding/>); (d) funding source; and (e) duration of project.

Applicants must address how potential fellows would gain experience and training in education research methods and statistical analyses. As appropriate, in addition to direct research experience, fellows may audit courses and engage in other training activities that enhance their knowledge and professional skills (e.g., auditing courses in areas not covered in their doctoral training, receiving training in the administration and scoring of assessment measures).

Fellows' research and training activities must address practical questions in education. It is anticipated that fellows will submit findings from their postdoctoral research activities to peer reviewed forums such as professional conferences and journals. Fellows will attend and present at professional conferences. Fellows are encouraged to work with the Training Director to seek independent grant support for their own research from the Institute or other sources.

**(iv) Stipend support, travel, and additional costs.**

The stipend amount for each fellow is \$50,000 per year (12 months) for up to 3 years. Fellows must make satisfactory progress in their research activities in order to remain eligible for fellowship funds. The fellowship must include fringe benefits (e.g., health insurance and normal fees) at the level afforded to other employees of the applicant institution who are at a similar level and class as the postdoctoral fellows, with the Institute's contribution not to exceed \$10,500 per year per fellow. There are no funds for tuition costs; fellows are expected to audit any courses that are part of their training. Thus the total stipend plus fringe benefits per fellow per year to be supported through Institute funds is \$60,500.

Additional funds of up to \$12,000 per year per fellow may be requested to defray the costs of recruiting fellows (e.g., advertisements, travel of applicants necessary for interviews), costs of research by fellows (local travel to research sites, materials, personal computer), and fellow registration and travel expenses to attend professional conferences. These funds may be used to take advantage of training opportunities and resources available through other entities (e.g., methodological or specialized statistical training institutes) that complement the training the postdoctoral fellows receive at the applicant's institution. A portion of these additional funds should be allocated to support both Training Director and fellows' travel for one three-day Institute research meeting each year in Washington, DC.

Applicants should note that there are no funds for faculty research or salaries through this program. Funds for facility renovation and maintenance are not allowed.

**c. Personnel**

Applicants must describe the qualifications of key personnel, including the Training Director, specifying their proposed role in the training program within the 15 page narrative of the proposal and elaborating how the research expertise of the key personnel reflect the content and methodological foci of the Institute. Training Directors should make their time commitment to the program clear in the training program narrative. Additional information on personnel should be provided in their 4-page biographical sketches (or abbreviated curriculum vitae).

**d. Resources**

Applicants must provide a description of the resources available to support the training fellowship at the participating institution, including field settings (e.g., schools, software development laboratories) with which the Training Director has a relationship that could support fellow's research projects.

**e. Awards**

The maximum length of the grant is 4 years. Applicants may request funds for up to 4 fellows. The amount of the award will depend on the number of fellows to be supported on stipends and the length of the fellowships (i.e., 2 or 3 years). The Institute anticipates making awards of approximately \$160,000 per year for 4 years. In no case should a request exceed \$200,000 per year (total costs = direct + indirect costs). The amounts above assume that four fellows will be supported for 2 years each, but applicants are free to request support for fewer fellows to be supported for 2 or 3 years each.

## **PART IV REQUIREMENTS FOR PREDOCTORAL RESEARCH TRAINING PROGRAM**

### **6. GENERAL REQUIREMENTS OF THE PREDOCTORAL RESEARCH TRAINING PROGRAM**

Program Officer: Dr. Robin Harwood (202-208-3896; Robin.Harwood@ed.gov)

To increase the supply of scientists and researchers in education who are prepared to conduct rigorous evaluation studies, develop and evaluate new products and approaches that are grounded in a science of learning, design and validate tests and measures, and address applied education research problems utilizing sophisticated statistical methods to analyze data, the Institute will fund interdisciplinary graduate research training programs in the education sciences. **The Institute's primary purpose for this program is to train graduate students to conduct the type of research that the Institute funds.**

Grants will be awarded to institutions of higher education that can create cohesive graduate programs in which predoctoral students will graduate within a traditional discipline (e.g., economics) but will receive a certificate in education sciences. Predoctoral students will be expected to conduct dissertations on education topics. The proposed graduate programs should be interdisciplinary and may involve a number of academic disciplines (e.g., psychology, political science, economics, statistics, education, special education, public health, sociology). The lead department or Program Director's department may be any one of the participating departments (e.g., economics, psychology, public policy, education, special education). However, the proposed interdisciplinary program must focus on training students to conduct applied research in education.

Due to the interdisciplinary requirements for predoctoral programs, only *one* Predoctoral Training Award *per* institution of higher education will be awarded.

For the FY 2009 Predoctoral Research Training program, applicants must apply under either Goal One or Goal Two. Under [Goal One](#), applicants who do *not* currently have a predoctoral training program funded by the Institute are welcome to apply. Under [Goal Two](#), applicants who currently have a predoctoral training program that began in FY 2004 or FY 2005 are eligible to apply.

Applicants who intend to revise and resubmit a proposal that was not funded in FY 2008 must indicate on the application form that their FY 2009 proposal is a revised proposal. Their prior reviews will be sent to this year's reviewers along with their proposal. Applicants should indicate the revisions that were made to the proposal on the basis of the prior reviews using no more than 3 pages of Appendix A.

#### **A. Specific Requirements For Applications Submitted to [Goal One](#) of the Predoctoral Training Program.**

Applicants who do *not* currently have an Institute of Education Sciences' Predoctoral Training Program are eligible to apply for support under **Goal One**. The requirements are listed below.

##### **a. Significance and purpose of the predoctoral research training program.**

Applicants should make a compelling case for the potential contribution of the proposed predoctoral research training program for training researchers to conduct the types of research that are funded by the Institute of Education Sciences. Applicants should make clear how the proposed predoctoral program is different from what currently exists at their university.

##### **b. Training program plan.**

Plans for the proposed predoctoral research training program must include the components listed below.

**(i) Program director.**

A Program Director will be the head of the training program and is expected to be an essential participant in its educational and research activities. The Program Director will have overall responsibility for the administration of the award, management of the program, and interactions with the Institute.

**(ii) Core faculty.**

Strong applications will have a core of five or more outstanding faculty (including the Program Director) with proven track records in research and training in education-related topics. Strong applications will include faculty who have demonstrated their ability to conduct research projects of the type that the Institute funds through the research grant programs of the National Center for Education Research and the National Center for Special Education Research (projects do not need to have been funded by the Institute but must be the same types of projects that the Institute funds). **A summary table of the research projects that have recently been completed or are currently being conducted by core faculty should be included in a table in Appendix A.** For each project listed in this table, the following information should be provided:

- (a) principal investigator and other core faculty involved in the project;
- (b) brief description of the research project, including methods used;
- (c) explanation of how the project fits with the Institute's research programs and goals as listed in the Institute's Education Research Request for Applications (<http://ies.ed.gov/funding/>);
- (d) funding source; and
- (e) duration of project.

Strong applications will provide evidence that the identified core faculty are committed to developing and sustaining the proposed graduate certificate program in the education sciences, and are able to prepare students to conduct the type of research that the Institute funds.

**(iii) Coordinated curriculum.**

Applicants must clearly describe the proposed education sciences training program. Applicants under Goal One must make explicit the ways in which the proposed program is different from what is currently being offered at their university.

**(1) Content emphases.** Applicants must identify **one or more content emphases** that reflect the Institute's research topic priorities (e.g., school readiness, mathematics, reading, special education or specific disabilities, education leadership, education policy) for the proposed program. Content emphases should represent a coherent training program, and not simply reflect the disparate areas of expertise reported by participating faculty. Content emphases can be reflected through available research apprenticeships, coursework, and/or other training activities.

**(2) Methodological emphases.** Applicants must identify **one or more methodological emphases** for the program that will prepare students to conduct the type of research that the Institute funds (e.g., research goals). For example, a proposed program might focus on training students to be proficient in the design and implementation of, and analysis of data from, cluster randomized trials. Alternatively, a program might focus on the design and validation of assessments, with methodological emphasis on techniques such as item response theory, principal components analysis, and exploratory and confirmatory factor analysis.

*The content and methodological emphases should together provide a coherent training program, such that the type of methodologies and statistical courses provided complement the content emphasis of the proposed training program.*



**(iv) Plan for coordinating across academic units.**

The coordinated curriculum will likely involve a number of academic departments and include courses offered by faculty from multiple disciplines. The Institute recognizes that developing and sustaining curriculum programs across academic units is not easy. Proseminars or special colloquia are typically not sufficient by themselves to produce strong collaborations among individual faculty and across academic units. Strong applications will include both strategies to support the interdisciplinary nature of the program (e.g., faculty research collaborations that cut across disciplines, team-teaching courses) and a documented *a priori* history of interdisciplinary collaboration.

**(v) Plan for developing a certificate in education sciences.**

The Institute expects the predoctoral research training programs to be coherent interdisciplinary training programs that will ultimately lead to a certificate, minor, or other university-recognized program in the education sciences. The Institute appreciates that establishing formally recognized graduate education programs takes time. Applicants should describe their plan for establishing the certificate in education sciences program in their university.

**(vi) Eligibility requirements for fellows.**

All fellowship stipend recipients must be citizens or permanent residents of the United States. In addition, fellowship recipients must be registered as full-time students during each term for which they will be receiving fellowship support.

**(vii) Additional requirements for fellows.**

Fellows' doctoral dissertations and other required products must address practical questions in education. Dissertation committees must include at least two faculty members who are part of the research training program.

**(viii) Plan for recruiting, mentoring, and retaining strong graduate students.**

Applicants must include an institutional plan for the recruitment, mentoring, and retention of a full-time complement of at least 10 graduate fellows, who must meet the requirements outlined in subsection vi. Applicants should discuss plans for outreach efforts to encourage applications from members of under-represented minorities. Applicants should describe how they plan to evaluate the success of their fellows on an annual basis.

**(v) Provision of fellowship stipend support for all fellows who are admitted into the program.**

The default stipend amount is \$30,000 per year (12 months) per fellow for up to 5 years. Applicants may propose other arrangements with justification (e.g., campus policies on levels of student stipends). Fellows must make satisfactory progress towards the degree in order to remain eligible for program funds. The fellowship also will provide a cost-of-education allowance of up to \$10,500 per year per fellow for tuition, health insurance, and normal fees. The total amount of stipend and cost-of-education support for each fellow to be provided through the training grant funds is \$40,500.

**(x) Additional funds.**

Training programs must request funds for the Program Director and fellows to travel for one three-day meeting each year in Washington, DC. Funds also may be requested to support fellow registration and travel expenses to attend professional conferences. Additional funds of \$1,000 per year per student may be requested to partially defray the routine costs of research by fellows (e.g., materials or local travel to research sites for fellows' master's thesis or doctoral dissertation). The total amount requested should be justified with information on the projected enrollment in the training program.

**(xi) Funds available to support faculty and the program in general.**

There are no funds for faculty research or salaries with the following exceptions: (a) up to 5 months total of faculty salary support for the development of new program curricula; (b) up to two months of salary support per year for the Program Director for management purposes; (c) up to half the salary of a new faculty member who would be recruited specifically to enhance the breadth and quality of the proposed research training program; (d) funds to support short-term visiting faculty who will enhance the breadth and quality of the research training program; and (e) travel funds for the Program Director to attend one three-day IES research meeting each year in Washington, DC. Funds may be requested to support colloquia as part of the training program, including but not limited to travel support for guest research and training presentations. Funds may be requested for fellows to take advantage of appropriate training opportunities offered at other institutions. Applicants may request salary support for a Program Coordinator for logistical and clerical program support. Typical requests are for up to six months of salary support; larger requests will be considered if the size of the program warrants such support. Funds for facility renovation and maintenance are *not* allowed.

**(xii) Institutional commitment.**

Strong applications will include evidence of institutional commitment(s) to furthering the goals of the training program and creating a supportive environment for research and education. Letters of support, submitted in Appendix A, are expected from participating departments, colleges, and the university.

**B. Specific Requirements for Applications Submitted to Goal Two of the Predoctoral Training Program.**

Applicants who currently have an Institute of Education Sciences' Predoctoral Training Program that was awarded either in FY 2004 or FY 2005 are eligible to apply for support under **Goal Two**. The requirements are listed below.

**a. Significance and purpose of the predoctoral research training program**

Applicants should make a compelling case for contribution of their current predoctoral research training program for training researchers to conduct the types of research that are funded by the Institute of Education Sciences and include a strong justification for the Institute to continue its support of the predoctoral research training program.

**(i) Evidence of accomplishments of current predoctoral students.**

Current recipients of the Institute's predoctoral training programs should provide evidence that their current students have or are developing the knowledge and skills that will enable them to prepare competitive grant proposals and/or carry out research projects that reflect the Institute's content and methodological foci. Applicants must include a summary table in Appendix A of the research projects that have been completed or are currently being conducted by predoctoral students who received support under the applicant's FY 2004 or FY 2005 predoctoral training program award. The table should specify the research topic and methods used for each project, identify the Institute research program and goal to which the project could have been submitted, as well as student publications and presentations.

**(ii) Discussion of challenges confronted during the current funding period and plans to address and overcome these challenges.**

Creating successful interdisciplinary predoctoral training programs is challenging. Current recipients of the Institute's predoctoral training programs should provide a discussion of the challenges confronted during the current funding program that have affected their ability to accomplish the purpose of their program (i.e., to train graduate students to conduct the type of research that the Institute funds). Applicants should discuss how these challenges were overcome

in the current grant period, and their plans for overcoming and addressing such challenges in future years.

**b. Training program plan**

Plans for the proposed predoctoral research training program *must include all of the information specified above in sections 6.A.b.(i) to 6.A.b.(xii).* **In addition, Goal Two applicants must include:**

**(i) Evidence supporting request for specific number of predoctoral students.**

Proposals for new awards from current predoctoral training grant recipients must include a justification for the number of students to be supported with potential FY 2009 funding in light of the number of students currently being supported. As part of the justification, the applicant should compare the number of fellows for whom support was requested in the original FY 2004 or FY 2005 award with the actual number of predoctoral fellows trained with support from the current predoctoral training award.

**C. Personnel**

Applicants must describe the qualifications of key personnel, including the Training Director, specifying their proposed role in the training program within the 25 page narrative of the proposal and elaborating how the research expertise of the key personnel reflect the content and methodological foci of the Institute. Program Directors should make their time commitment to the program clear in the training program narrative. Additional information on personnel should be provided in their 4-page biographical sketches (i.e., abbreviated curriculum vitae).

**D. Resources**

Applicants must provide a description of the resources available to support the training program at the participating institution, including field settings (e.g., schools, software development labs) with which the institution has a relationship that could support fellows' training and research projects.

**E. Awards**

The maximum award is \$5,000,000 (total cost = direct + indirect) for a five-year period. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends.

## **PART V GENERAL SUBMISSION AND REVIEW INFORMATION**

### **7. MECHANISM OF SUPPORT**

The Institute intends to award grants under the Education Research Training programs pursuant to this request for applications. The maximum length of the award period is four years for the postdoctoral awards and five years for the predoctoral awards.

### **8. FUNDING AVAILABLE**

For the **Postdoctoral Training Program**, awards will typically be about \$160,000 (total cost = direct + indirect cost) per year for 4 years. In no case should a request exceed \$200,000 (total cost) per year.

For the **Predocutorial Training Program**, the maximum award is \$5,000,000 (total cost = direct + indirect cost) for a five-year period. The amount of the award will depend on the scope of the program and the number of fellows to be supported on stipends.

Although the plans of the Institute include these training programs, awards pursuant to this request for applications are contingent upon the availability of funds and the receipt of a sufficient number of meritorious applications. The number of programs funded depends upon the number of high quality applications submitted.

### **9. ELIGIBLE APPLICANTS**

For the Education Research Training Programs (both Postdoctoral and Predocutorial), eligible applicants are academic institutions in the United States and its territories that grant doctoral degrees in fields relevant to education. The proposed Directors of these training programs must be the Principal or Co-Principal Investigator on one or more education research grants currently supported by the Institute or other funding sources.

### **10. DESIGNATION OF PRINCIPAL INVESTIGATOR**

The applicant institution is responsible for identifying the Principal Investigator. The Principal Investigator is the individual who has the authority and responsibility for the proper conduct of the training program, including the appropriate use of federal funds and the submission of required progress reports. An applicant institution may elect to designate more than one Principal Investigator. In so doing, the applicant institution identifies them as individuals **who share the authority and responsibility** for leading and directing the training program intellectually and logistically. All Principal Investigators will be listed on any grant award notification. However, institutions applying for funding must designate a single point of contact for the project. The role of this person is primarily for communication purposes on the scientific and related budgetary aspects of the project and should be listed as the Principal Investigator. All other Principal Investigators should be listed as Co-Principal Investigators.

### **11. SPECIAL REQUIREMENTS**

Education Research Training grant recipients who have not successfully recruited the number of fellows for whom they requested funding will have their continuation funding adjusted as a result.

Research associated with these training fellowship must be relevant to U.S. education. Fellowship recipients are expected to publish or otherwise make publicly available the results of the work supported through this training fellowship.

Postdoctoral and predoctoral fellowship recipients and Directors of the Postdoctoral and Predocutorial Training Programs must attend one three-day meeting each year in Washington, DC, with other grantees and Institute staff.

Postdoctoral and predoctoral fellowship recipients and Directors of the Postdoctoral and Predoctoral Training Programs must complete the Institute's annual Research Training Survey in order to help the Institute determine if the training programs are achieving the Institute's goal of producing high quality education researchers.

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or eight percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees, and capital expenditures of \$5,000 or more.

## **12. LETTER OF INTENT**

A letter indicating a potential applicant's intent to submit an application is encouraged, but optional, for each application. Although the letter of intent is optional, is not binding, and does not enter into the review of a subsequent application, the information that it contains allows Institute staff to estimate the potential workload to plan the review. The letter of intent form must be submitted electronically by the date listed in this document, using the instructions provided at: <https://ies.constellagroup.com>.

### **A. Content**

A letter indicating an applicant's intent to submit an application is optional, but encouraged, for each application. The letter of intent form must be submitted electronically by the date listed in this document, using the instructions provided at: <https://ies.constellagroup.com>.

#### **a. Postdoctoral research training program**

The letter of intent should include:

- Descriptive title;
- The name, institutional affiliation, address, telephone number, and e-mail address of the Training Director;
- Brief description of the current research projects that the fellows would be part of;
- Duration of the proposed project;
- Estimated budget request by year and a total budget request.

#### **b. Predoctoral research training program**

The letter of intent should include:

- Descriptive title;
- The name, institutional affiliation, address, telephone number, and e-mail address of the Program Director;
- Brief description of the proposed program;
- Names of all core faculty to the training program;
- Duration of the proposed project;
- Estimated budget request by year and a total budget request.

### **B. Format and Page Limitation**

The project description should be single-spaced and should not exceed one page (about 3,500 characters).

## **13. APPLICATION PACKAGE AVAILABLE ON GRANTS.GOV**

### **A. Date Application Package is Available on Grants.gov**

The application form approved for use in the competitions specified in this RFA is the government-wide SF424 Research and Related (R&R) Form (OMB Number 4040-0001).

Application forms and instructions for the electronic submission of applications will be available for the programs of research listed in this RFA from the following website:

<http://www.Grants.gov/> by the following date:

August 4, 2008

## **B. Download Correct Application Package**

### **a. CFDA number**

Applicants must first search by the CFDA number for each IES Request for Applications without the alpha suffix to obtain the correct downloadable Application Instructions and Application Package. For the Education Research Training Grants Request for Applications, applicants must search on: **CFDA 84.305**.

### **b. Education Research Training Grants Application Instructions and Application Package**

The Grants.gov search on CFDA 84.305 will yield more than one application package. For the Education Research Training Grants Request for Applications (i.e., the research topics listed in this Request for Applications), applicants will be able to download packages marked:

#### **CFDA 84-305B2009 Education Research Training Grants Application Instructions and Application Package**

An applicant must download the application package designated for the competition and deadline date to which the applicant wishes to apply or the application will be submitted to the wrong competition.

## **14. SUBMISSION PROCESS AND DEADLINE**

Applications must be submitted **electronically by 4:30 p.m., Washington, DC time** on the application deadline date, using the ED standard forms and the instructions provided on the Grants.gov website.

Potential applicants should check this site for information about the electronic submission procedures that must be followed and the software that will be required.

## **15. APPLICATION CONTENT AND FORMATTING REQUIREMENTS**

### **A. Overview**

All of the instructions and requirements regarding (a) submission of the application, (b) application page limits, (c) acceptable format, and (d) necessary attachments (.PDF files) will be provided in the **Application Instructions** document for this competition that can be found under the "For Applicants -- Apply for Grants" link of Grants.gov. Also, all of the required forms will be provided in the **Application Package** that accompanies the Application Instructions.

In this section, the Institute provides instructions regarding the content of the (a) project summary/abstract, (b) training program narrative, (c) bibliography and references cited, (d) biographical sketches of senior/key personnel, (e) narrative budget justification (f) subaward budget, (g) Appendix A, and (j) additional forms. The instructions below will be reiterated in the Application Instructions document for this competition, which will be available, as noted above, under the "For Applicants -- Apply for Grants" link of Grants.gov.

### **B. General Format Requirements**

Margin, format, and font size requirements apply to the project summary, project narrative, bibliography, biographical sketches, narrative budget justification, Appendix A, and Appendix B. To ensure that the text is easy for reviewers to read and that all applicants have the same amount of available space in which to describe their projects, applicants must adhere to the type size and format specifications for the entire narrative including footnotes. **It is very important that applicants review carefully the "Application Format Requirements" outlined in the Fiscal Year 2009 Application Package Highlights**, which will be part of the application instructions, to be available on <http://www.Grants.gov>.

**a. Page and Margin Specifications**

For the purposes of applications submitted under this RFA, a "page" is 8.5 in. x 11 in., on one side only, with 1 inch margins at the top, bottom, and both sides.

**b. Spacing**

Text must be single spaced in the narrative.

**c. Type Size (Font Size)**

Type must conform to the following three requirements:

- The height of the letters must not be smaller than a type size of 12 point.
- Type density, including characters and spaces, must be no more than 15 characters per inch (cpi). For proportional spacing, the average for any representative section of text must not exceed 15 cpi.
- Type size must yield no more than 6 lines of type within a vertical inch.

Applicants should check the type size using a standard device for measuring type size, rather than relying on the font selected for a particular word processing/prINTER combination. The type size used must conform to all three requirements. Small type size makes it difficult for reviewers to read the application; consequently, the use of small type will be grounds for the Institute to return the application without peer review.

Adherence to type size and line spacing requirements is necessary so that no applicant will have an unfair advantage, by using small type or by providing more text in their applications. **Note, these requirements apply to the PDF file as submitted.** As a practical matter, applicants who use a 12-point Times New Roman font without compressing, kerning, condensing or other alterations typically meet these requirements.

Figures, charts, tables, and figure legends may be in a smaller type size but must be readily legible.

**d. Graphs, diagrams, tables**

Applicants must use only black and white in graphs, diagrams, tables, and charts. The application must contain only material that reproduces well when photocopied in black and white.

**C. Research training program summary/abstract**

**a. Submission**

The project summary/abstract will be submitted as a .PDF attachment.

**b. Page limitations and format requirements**

The project summary/abstract is limited to 1 single-spaced page and must adhere to the margin, format, and font size requirements above.

**c. Content for postdoctoral research training program**

The project summary/abstract should include:

- Title of the research training fellowship;
- Name and institutional affiliation of the Training Director;
- Number of fellows to be recruited and length of fellowship;
- Brief description of education research currently conducted by the proposed Training Director and opportunities for fellows to be involved in education research; and
- Brief description of the proposed training fellowship, highlighting its key research and educational features.

**d. Content for predoctoral research training program**

The project summary/abstract should include:

- Title of the research training program;

- Name and institutional affiliation of the Program Director and identified core faculty; and
- Brief description of the proposed training program.

#### **D. Research Training Program Narrative**

##### **a. Postdoctoral research training program**

###### **(i) Submission**

The project narrative will be submitted as a .PDF attachment.

###### **(ii) Page limitations and format requirements**

The project narrative is limited to **15 single-spaced pages** for all applicants. The 15-page limit for the project narrative does not include any of the SF 424 forms, the one-page summary/abstract, the appendices, research on human subjects information, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, subaward budget information, or certifications and assurances.

Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively.

###### **(iii) Format for citing references in text**

To ensure that all applicants have the same amount of available space in which to describe their projects in the project narrative, applicants should use the author-date style of citation (e.g., James, 2004), such as that described in the *Publication Manual of the American Psychological Association, 5th Ed.* (American Psychological Association, 2001).

###### **(iv) Content**

Incorporating the requirements outlined under the section on Requirements For The Postdoctoral Research Training Grant Program, and the requirements listed under the relevant training grant topic, the *project narrative* provides the majority of the information on which reviewers will evaluate the proposal.

The project narrative must include four sections: (a) Significance, (b) Training Program Plan, (c) Personnel, and (d) Resources. Information to be included in each of these sections is detailed in **Part III: Requirements for the Postdoctoral Research Training Grant Program.**

##### **b. Predocutorial research training program**

###### **(i) Submission**

The project narrative will be submitted as a .PDF attachment.

###### **(ii) Page limitations and format requirements**

The project narrative is limited to **25 single-spaced pages** for all applicants. The 25-page limit for the project narrative does not include any of the SF 424 forms, the one-page summary/abstract, the appendices, research on human subjects information, bibliography and references cited, biographical sketches of senior/key personnel, narrative budget justification, subaward budget information or certifications and assurances.

Reviewers are able to conduct the highest quality review when applications are concise and easy to read, with pages numbered consecutively.

###### **(iii) Format for citing references in text**

To ensure that all applicants have the same amount of available space in which to describe their projects in the project narrative, applicants should use the author-date style of citation (e.g., James, 2004), such as that described in the *Publication Manual of the American Psychological Association, 5th Ed.* (American Psychological Association, 2001).



**(iv) Content**

Incorporating the requirements outlined under Section 6.A. for Goal One proposals and Section 6.B. for Goal Two proposals, and the requirements listed under the relevant training grant topic, the *training program narrative* provides the majority of the information on which reviewers will evaluate the proposal.

The training program narrative must include four sections: (a) Significance, (b) Training Program Plan, (c) Personnel, and (d) Resources. Information to be included in each of these sections is detailed in **Part IV: Requirements for the Predoctoral Research Training Grant Program.**

**E. Bibliography and References Cited**

**a. Submission**

The section will be submitted as a .PDF attachment.

**b. Page limitations and format requirements**

There are no limitations to the number of pages in the bibliography. The bibliography must adhere to the margin, format, and font size requirements described in section 15.B. General Format Requirements.

**c. Content**

Applicants should include complete citations, including the names of all authors (in the same sequence in which they appear in the publication), titles (e.g., article and journal, chapter and book, book), page numbers, and year of publication for literature cited in the research narrative.

**F. Biographical Sketches of Senior/Key Personnel**

**a. Submission**

The section will be submitted as a .PDF attachment.

**b. Page limitations and format requirements**

A biographical sketch should be provided for the principal investigator and other key personnel. **Each biographical sketch (e.g., abbreviated curriculum vitae) is limited to 4 pages.** The biographical sketch must adhere to the margin, format, and font size requirements described in section 15.B General Format Requirements.

**c. Content**

Each biographical sketch should include information sufficient to demonstrate that personnel possess training and expertise commensurate with their duties (e.g., publications, grants, relevant research experience) and have adequate time devoted to the project to carry out their duties. Applicants are reminded to review information in section 10 Designation of Principal Investigator.

**d. List of current and pending grants**

Applicants should provide a list of all current and pending grants along with the proportion of the individual's time allocated to each project for the principal investigator and other key personnel for the training program. This information is to be provided as a table attached to the biographical sketch (i.e., a fifth page).

**G. Narrative Budget Justification**

**a. Submission**

The section will be submitted as a .PDF attachment.

**b. Page limitations and format requirements**

There are no page limitations for the narrative budget justification. The narrative budget justification must adhere to the margin, format, and font size requirements described in section 15.B. General Format Requirements.

**c. Content**

The narrative budget justification should provide sufficient detail to allow reviewers to judge whether reasonable costs have been attributed to the project. The budget justification should correspond to the itemized breakdown of project costs that is provided in the Research & Related Budget (SF 424) Sections A & B; C, D, & E; and F-K. It should include the time commitments and brief descriptions of the responsibilities of key personnel. For consultants, the narrative should include the number of days of anticipated consultation, the expected rate of compensation, travel, per diem, and other related costs. A justification for equipment purchase, supplies, travel and other related project costs should also be provided in the budget narrative for each project year outlined in the Research & Related Budget (SF 424).

For those applications that include a subaward(s) for work conducted at collaborating institutions, the narrative should also provide the details about the subaward(s). Include the actual subaward budgets as a separate attachment. (See below "Subaward Budget".)

**d. Budget clarification for Predoctoral Fellowship Goal 2 Applicants only**

Goal Two proposals must clearly demonstrate how the budgets from the FY 2004 or FY 2005 and FY 2009 proposals are distinct and non-overlapping. That is, the budget justification should make clear which current and future project costs are charged to the FY 2004 or FY 2005 award and which are charged to the FY 2009 award. For example, the applicant should identify which predoctoral students will continue to be supported by the FY 2004 or FY 2005 award and which predoctoral students would be supported by an FY 2009 award.

**e. Indirect cost rate**

U.S. Department of Education policy (34 CFR 75.562 (c)(2)) limits indirect cost reimbursement on a training grant to the recipient's actual indirect costs, as determined by its negotiated indirect cost rate agreement, or eight percent of a modified total direct cost base, whichever amount is less. For the purposes of this competition, a modified total direct cost base is defined as total direct costs less stipends, tuition and related fees, and capital expenditures of \$5,000 or more.

**H. Subaward Budget**

**a. Submission**

The section will be submitted as a .PDF attachment.

**b. Page limitations and format requirements**

To allow applicants to enter subaward budget information in accordance with a prescribed format (R&R Subaward Budget), an Excel spreadsheet will be provided at:

<http://ies.ed.gov/funding/>

Applicants will download and complete the spreadsheet in Excel format, convert it to a .PDF file, and then upload it as an attachment. There are no page limitations to the spreadsheet.

**c. Content**

For applications that include a subaward(s) for work conducted at collaborating institutions, applicants must submit an itemized budget spreadsheet for each subaward for each project year. As noted above, the details of the subaward costs should be included in the Narrative Budget Justification.

**I. Appendix A**

**a. Submission**

Appendix A should be included at the end of the Project Narrative and submitted as part of the same .PDF attachment.

**b. Page limitations and format requirements**

Appendix A is limited to 15 pages. It must adhere to the margin, format, and font size requirements described in section 25.B. General Format Requirements.

**c. Content for postdoctoral research training program**

**(i) Purpose.**

The purpose of Appendix A is to allow the applicant to include any figures, charts, or tables that supplement the training fellowship narrative. As described in section 5.A.b.iii, applicants should include a summary table of ongoing education research projects that are being conducted by the training director and other faculty involved in the proposed training program. For example, applicants might provide a table listing the projects that potential fellows could work on. As described in Section 5.A.a., applicants who currently have or in the past have had a postdoctoral research training grant from the Institute must also include information on current and former postdoctoral fellows. In addition, in the case of a resubmission, the applicant may use up to 3 pages of the appendix to describe the ways in which the revised proposal is responsive to prior reviewer feedback. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the training program must be included in the postdoctoral training narrative.

**(ii) Letters of support.**

Applicants must provide a support letter from the participating institution. The letter should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the training fellowship that will be required if the application is funded.

**d. Content for predoctoral research training program**

**(i) Purpose.**

The purpose of Appendix A is to allow the applicant to include any figures, charts, or tables that supplement the training fellowship narrative. For example, applicants might provide a table listing the projects that potential fellows could work on. The applicant must also include a table summarizing the research topics and methodological expertise of identified core faculty/key personnel. Goal Two applicants must include a table in Appendix A summarizing the research topics and methodological foci of ongoing and completed research projects of current predoctoral fellows. Applicants also may include any additional figures, charts, or tables that supplement the training fellowship narrative in this section. For example, applicants might provide a table listing the projects that potential fellows could work on. In addition, in the case of a resubmission, the applicant may use up to 3 pages of the appendix to describe the ways in which the revised proposal is responsive to prior reviewer feedback. These are the only materials that may be included in Appendix A; all other materials will be removed prior to review of the application. Narrative text related to any aspect of the training program (e.g., scope and sequence of training) must be included in the predoctoral training narrative.

**(ii) Letters of support.**

The applicant must provide a support letter from the participating institution, and any additional letters of support from participating colleges or departments within the institution. The letters should include enough information to make it clear that the author of the letter understands the nature of the commitment of time, space, and resources to the training fellowship that will be required if the application is funded.

**J. Additional Forms**

Please note that applicants selected for funding will be required to submit the following certifications and assurances before a grant is issued:

- (1) SF 424B-Assurances-Non-Construction Programs
- (2) Grants.gov Lobbying Form
- (3) SF-LLL (if applicable) - Disclosure of Lobbying Activities
- (4) Protection of Human Research Subjects assurance and/or Institutional Review Board certification, as appropriate\*

\*Refer to the Fiscal Year 2009 Application Package for New Grants, available on <http://www.Grants.gov>, which details the information about the Human Subjects narrative, if applicable, that is required to be submitted with the application.

**16. APPLICATION PROCESSING**

Applications must be received by **4:30 pm, Washington, D.C. time** on the application deadline date listed in the heading of this request for applications. Upon receipt, each application will be reviewed for completeness and for responsiveness to this request for applications. Applications that do not address specific requirements of this request will be returned to the applicants without further consideration.

**17. PEER REVIEW PROCESS**

Applications that are compliant and responsive to this request will be evaluated for scientific and technical merit. Reviews will be conducted in accordance with the review criteria stated below by a panel of scientists who have substantive and methodological expertise appropriate to the program of research and request for applications.

Each application will be assigned to one of the Institute's scientific review panels. At least two primary reviewers will complete written evaluations of the application, identifying strengths and weaknesses related to each of the review criteria. Primary reviewers will independently assign a score for each criterion, as well as an overall score, for each application they review. Based on the overall scores assigned by primary reviewers, an average overall score for each application will be calculated and a preliminary rank order of applications will be prepared before the full peer review panel convenes to complete the review of applications.

The full panel will consider and score only those applications deemed to be the most competitive and to have the highest merit, as reflected by the preliminary rank order. A panel member may nominate for consideration by the full panel any proposal that he or she believes merits full panel review but would not have been included in the full panel meeting based on its preliminary rank order.

**18. REVIEW CRITERIA FOR SCIENTIFIC MERIT**

The purpose of Institute-supported research is to contribute to the solution of education problems and to provide reliable information about the education practices that support learning and improve academic achievement and access to education for all students. Reviewers for all applications will be expected to assess the following aspects of an application in order to judge the likelihood that the proposed research

training program will have a substantial impact on the pursuit of that goal. Information pertinent to each of these criteria is also described above in the section on Requirements of the Proposed Training Fellowship (Section 5.A. for Postdoctoral Training Program; Section 6.A. and Section 6.B. for Predoctoral Training Program).

#### **A. Postdoctoral Research Training Grant Program**

##### **a. Significance**

Does the applicant provide a compelling rationale for the significance of the proposed postdoctoral research training program as defined in Section 5.A.a Significance and purpose of the postdoctoral research training program?

##### **b. Training Program Plan**

Does the applicant meet the requirement for the training program plan described in Section 5.A.b Training program plan?

##### **c. Personnel**

Does the description of the personnel make it apparent that the Training Director and other faculty possess the training and experience and will commit sufficient time to competently implement the proposed training fellowship?

##### **d. Resources**

Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed training activities? Do the commitments of each partner show support for the implementation and success of the project?

#### **B. Predoctoral Research Training Grant Program**

##### **a. Significance**

Does the applicant provide a compelling rationale for the significance of the proposed predoctoral research training program as defined in Section 6.A.a for goal one and Section 6.B.a for goal two, Significance and purpose of the predoctoral training program?

##### **b. Training program plan**

Does the applicant meet the requirements for the training program plan described in Section 6.A.b. Training program plan for Goal One; Section 6.B.b Training program plan for Goal Two?

##### **c. Personnel**

Does the description of the personnel make it apparent that the Training Director and other faculty possess the training and experience and will commit sufficient time to competently implement the proposed training fellowship?

##### **d. Resources**

Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed training activities? Do the commitments of each partner show support for the implementation and success of the project?

## **19. RECEIPT AND START DATE SCHEDULE**

### **A. Letter of Intent Receipt Dates:**

Research Training Grant Program July 10, 2008

### **B. Application Deadline Date:**

Research Training Grant Program October 2, 2008

### **C. Earliest Anticipated Start Date:**

Research Training Grant Program July 1, 2009

## **20. AWARD DECISIONS**

The following will be considered in making award decisions:

- Overall strength of the proposed training program as determined by the peer review process
- Responsiveness to the requirements of this request
- Performance and use of funds under a previous Federal award
- Contribution to the overall goals described in this request
- Availability of funds

## **21. INQUIRIES MAY BE SENT TO:**

Dr. Robin Harwood  
Institute of Education Sciences  
555 New Jersey Avenue, NW  
Washington, DC 20208

Email: Robin.Harwood@ed.gov  
Telephone: (202) 208-3896

## **22. PROGRAM AUTHORITY**

20 U.S.C. 9501 *et seq.*, the "Education Sciences Reform Act of 2002," Title I of Public Law 107-279, November 5, 2002. This program is not subject to the intergovernmental review requirements of Executive Order 12372.

## **23. APPLICABLE REGULATIONS**

The Education Department General Administrative Regulations (EDGAR) in 34 CFR parts 74, 77, 80, 81, 82, 84, 85, 86 (part 86 applies only to institutions of higher education), 97, 98, and 99. In addition 34 CFR part 75 is applicable, except for the provisions in 34 CFR 75.100, 75.101(b), 75.102, 75.103, 75.105, 75.109(a), 75.200, 75.201, 75.209, 75.210, 75.211, 75.217, 75.219, 75.220, 75.221, 75.222, and 75.230.

## **24. REFERENCES**

Coalition for Evidence-Based Policy. (2002, November). Rigorous evidence: The key to progress in education? Lessons from medicine, welfare and other fields. *Proceedings of The Coalition for Evidence-Based Policy Forum*, Washington, DC.

National Research Council. (1999). *Improving student learning: A strategic plan for education research and its utilization*. Committee on a Feasibility Study for a Strategic Education Research Program. Commission on Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.

6/16/2008

National Research Council. (2000). *How people learn: Brain, mind, experience and school*. Committee on Developments in the Science of Learning. J. Bransford, A. Brown, and R. Cocking (Eds.) Committee on Learning Research and Educational Practice. S. Donovan, J. Bransford, and J. Pellegrino (Eds.). Commission on Behavioral and Social Sciences in Education. Washington, DC: National Academy Press.

National Research Council (2002). *Scientific research in education*. Committee on Scientific Principles for Education Research. R.J. Shavelson and L. Towne (Eds.). Center for Education. Division of Behavioral and Social Sciences and Education. Washington, DC: National Academy Press.